

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims:

1. (Currently Amended) A method of detecting and recovering from violations in a peer-to-peer relay network, comprising:

receiving a message at a peer system from a sending peer system connected to said peer system in a peer-to-peer relay network;

detecting a ~~violation~~ manipulation of data in said received message, said manipulation of data changing the outcome of processing by the peer system; and

sending ~~an a manipulated data~~ alert message to ~~each other peer system~~ systems connected to said peer system in said peer-to-peer relay ~~network~~ network, the manipulated data alert message identifying the sending peer responsible for the manipulation of data

~~wherein each peer system in said peer-to-peer relay network stores a connection limit defining a number of other peer systems up to which that peer system is permitted to connect, and each peer system stores a set of one or more relay rules for relaying data to other peer systems connected to that peer system.~~

2. (Currently Amended) The method of claim 1, wherein:
said ~~violation~~ manipulation of data is a cheating violation.

3. (Original) The method of claim 2, further comprising:
receiving a respective additional message from each of at least one other peer systems
connected to said peer system;
wherein detecting said cheating violation includes:
comparing said message from said sending peer system with each of said additional
messages; and
determining that said message from said sending peer system is different from at least one
of said additional messages.

4. (Original) The method of claim 2, wherein:
detecting said cheating violation includes:
generating predicted data;
comparing said message from said sending peer system with said predicted data; and
determining that said message from said sending peer system is different from said
predicted data.

5. (Original) The method of claim 4, further comprising:
sending said predicted data to each peer system connected to said peer system in said peer-
to-peer relay network.

6. (Currently Amended) The method of claim 1, wherein:
said ~~violation~~ manipulation of data is a security violation.

7. (Original) The method of claim 6, wherein:
detecting said security violation includes detecting invalid data in said message.

8. (Original) The method of claim 6, wherein:
detecting said security violation includes detecting said message was sent using improper
sending procedures.

9. (Original) The method of claim 8, wherein:
said message was sent as part of denial of service attack.

10. (Original) The method of claim 1, further comprising:
ignoring further messages sent by said sending peer system.

11. (Original) The method of claim 1, further comprising:
causing said sending peer system to disconnect from said peer-to-peer relay network.

12. (Currently Amended) The method of claim 1, further comprising:
sending said manipulated data alert message to a server connected to said peer system.

13. (Original) The method of claim 1, further comprising:
the data relayed by peer systems is update data for a network environment.

14. (Original) The method of claim 1, wherein:
the data relayed by peer systems is update data for an online game.

15. (Original) The method of claim 1, wherein:
at least one peer system is a network-enabled game console.

16. (Original) The method of claim 1, wherein:
at least two peer systems are connected through the Internet.

17. (Currently Amended) A peer system in a peer-to-peer relay network,
comprising:
means for receiving a message at a peer system from a sending peer system connected to
said peer system in a peer-to-peer relay network;
means for detecting a ~~violation~~ manipulation of data in said received message, said
manipulation of data changing the outcome of processing by the peer system; and
means for sending ~~an~~ a manipulated data alert message to ~~each other peer system~~ systems
connected to said peer system in said peer-to-peer relay ~~network~~ network, the manipulated alert
message identifying the sending peer responsible for the manipulation of data
~~wherein each peer system in said peer-to-peer relay network stores a connection limit~~
~~defining a number of other peer systems up to which that peer system is permitted to connect, and~~
~~each peer system stores a set of one or more relay rules for relaying data to other peer~~
~~systems connected to that peer system.~~

18. (Currently Amended) The peer system of claim 17, wherein:
said ~~violation~~ manipulation of data is a cheating violation.
19. (Currently Amended) The peer system of claim 17, wherein:
said ~~violation~~ manipulation of data is a security violation.
20. (Currently Amended) The peer system of claim 17, further comprising:
means for sending said data manipulation alert message to a server connected to said peer system.
21. (Currently Amended) A ~~computer program, stored on a tangible~~ storage medium storing a computer-readable program that when executed on a processor cause the processor to execute, for use in a method in a peer system in of a peer-to-peer relay network, the method comprising the steps of ~~program comprising executable instructions that cause a computer to:~~

process ~~processing~~ a received message at a peer system from a sending peer system connected to said peer system in a peer-to-peer relay network

detecting a ~~violation~~ manipulation of data in said received message, said manipulation of data changing the outcome of processing by the peer system; and

sending an a manipulated data alert message to each other peer system systems connected to said peer system in said peer-to-peer relay ~~network;~~ network, the manipulated data alert message identifying the sending peer responsible for the manipulation of data

~~wherein each peer system in said peer-to-peer relay network stores a connection limit defining a number of other peer systems up to which that peer system is permitted to connect, and each peer system stores a set of one or more relay rules for relaying data to other peer systems connected to that peer system.~~

22. (Currently Amended) The computer program of claim 21, wherein:
said ~~violation~~ manipulation of data is a cheating violation.

23. (Currently Amended) The computer program of claim 21, wherein:
said ~~violation~~ manipulation of data is a security violation.

24. (Currently Amended) The computer program of claim 21, further
comprising ~~executable instructions that cause a computer to: send~~ sending said data manipulation
alert message to a server connected to said peer system.

25. (New) The method of claim 1, wherein detecting the manipulation of data
comprises the peer system detecting a difference in the data of the message received from the
sending peer from the data of the same message received from other peer systems connected to the
peer system.

26. (New) The method of claim 1, further comprising:
relaying back the received message to the sending peer by the peer system;

comparing the relayed back message by the sending peer to the received message to identify a peer responsible for the manipulation of data.

27. (New) The method of claim 1, further comprising ignoring messages from the sending peer responsible for the manipulation of data.

28. (New) The method of claim 1, further comprising forcing the sending peer responsible for the manipulation of data to disconnect from the peer-to-peer relay network.